



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/086,792	02/28/2002	Donald James McNamara	13768.242	8972

47973 7590 01/19/2006

WORKMAN NYDEGGER/MICROSOFT  
1000 EAGLE GATE TOWER  
60 EAST SOUTH TEMPLE  
SALT LAKE CITY, UT 84111

EXAMINER

MEUCCI, MICHAEL D

ART UNIT

PAPER NUMBER

2142

DATE MAILED: 01/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Response to Rule 312 Communication</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/086,792	MCNAMARA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Michael D. Meucci	2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

1. ☒ The amendment filed on 01 December 2005 under 37 CFR 1.312 has been considered, and has been:

a) ☐ entered.

b) ☐ entered as directed to matters of form not affecting the scope of the invention.

c) ☐ disapproved because the amendment was filed after the payment of the issue fee.

Any amendment filed after the date the issue fee is paid must be accompanied by a petition under 37 CFR 1.313(c)(1) and the required fee to withdraw the application from issue.

d) ☒ disapproved. See explanation below.

e) ☐ entered in part. See explanation below.

See examiner's amendment.

*Beatriz Prieto*  
**BEATRIZ PRIETO**  
 PRIMARY EXAMINER  
 1/13/06

**DETAILED ACTION**

***Response to 312 Communication***

1. The amendment after allowance was non-compliant because claims 47 and 48 contained incorrect status identifiers. Corrections of the status identifiers have been made in the examiner's amendment below. Changes the applicant intended to make with these prior amendments have been authorized for inclusion in the examiner's amendment.

**EXAMINER'S AMENDMENT**

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

3. Authorization for this examiner's amendment was given in a telephone interview with Jens Jenkins (Reg. No. 44,803) on 13 January 2006. Claims 7, 9, 51, and 53 have been amended.

4. The listing of claims replaces all prior versions and listings of claims in the application:

1 – 5 (Cancelled)

6. (Previously Presented) The method of claim 47, wherein the listener component of the notification service receives the notification from a wireless device.

7. (Currently Amended) The method of claim 6, further comprising:  
an act of delivering the notification to a mobile service provider.

8. (Previously Presented) The method of claim 47, wherein the listener component of the notification service receives the notification from a mobile service provider.

9. (Currently Amended) The method of claim 8, further comprising:  
an act of delivering the notification to a wireless device.

10. (Previously Presented) The method of claim 47, wherein the act of referencing the configuration XML document at the routing component to determine a category associated with the notification comprises:  
determining that the notification is an instant message.

11. (Previously Presented) The method of claim 47, wherein the act of referencing the configuration XML document at the routing component to determine a category associated with the notification comprises:

an act of failing to detect any category associated with the notification; and  
an act of determining that the notification is of a default category based on the failure to detect any category associated with the notification.

12. (Previously Presented) The method of claim 47, wherein the act of referencing the configuration XML document at the routing component to determine a category associated with the notification comprises:

determining that the notification is a buddy list-related notification.

13. (Previously Presented) The method of claim 47, wherein the act of referencing the configuration XML document at the routing component to determine a category associated with the notification comprises:

determining that the notification is a news-related notification.

14. (Previously Presented) The method of claim 47, wherein the act of referencing the configuration XML document at the routing component to determine a category associated with the notification comprises:

determining that the notification is a mobile-originated notification.

15. (Previously Presented) The method of claim 47, wherein the act of performing one or more transform operations on the notification content based on the category associated with the notification comprises:

determining whether to check that the notification should be muted.

16. (Previously Presented) The method of claim 47, wherein the act of performing one or more transform operations on the notification content based on the category associated with the notification comprises:

accessing a user profile associated with a sender or receiver of the notification.

17. (Previously Presented) The method of claim 47, wherein the act of performing one or more transform operations on the notification content based on the category associated with the notification comprises:

authenticating the notification by verifying whether a user account is disabled or authorized.

18. (Previously Presented) The method of claim 47, wherein the act of performing one or more transform operations on the notification content based on the category associated with the notification comprises:

inserting an advertisement into the notification.

19. (Previously Presented) The method of claim 47, wherein the act of performing one or more transform operations on the notification content based on the category associated with the notification comprises:

formatting the notification for the notification sink.

20. (Previously Presented) The method of claim 47, wherein the act of performing one or more transform operations on the notification content based on the category associated with the notification comprises:

determining whether a user has exceeded a message limit.

21. (Previously Presented) The method of claim 47, wherein the act of performing one or more transform operations on the notification content based on the category associated with the notification comprises:

determining the transform operations to perform based on the category.

22. (Cancelled)

23. (Previously Presented) The method of claim 21, further comprising an act of determining the order of operations to perform based on the category.

24-46. (Cancelled)

47. (Previously Presented) In a network environment comprised of one or more computer or devices such as mobile devices that serve as notification sources, meaning that such computer or devices serve as sources where notifications are generated in response to an event, such notifications being generated in a network format comprised of an XML document included within an HTTP post request or included with a SOAP message that is included within an HTTP post request, and wherein the network is also comprised of one or more computers or devices that serve as notification sinks, meaning that such computer or devices serve as destinations on the network where the generated notifications are to be sent, a method for delivering such notifications from a notification service that scales the notifications to the number and variety of notification sources and notification sinks at the time such notifications are generated and delivered, the method comprising:

(a) receiving, at a listening component of the delivery service, a notification generated by a notification source in a network format comprised of an XML document included within an HTTP post request, notification content of the notification being structured within the XML document that identifies data including a category of notification and transform operations associated with the category that may be performed on notifications of the particular category;

(b) translating the notification into an internal processing format

(c) forwarding the translated notification to a routing component of the notification service where categorizations of notifications that may be received are stored in an XML



configuration document, wherein each of the categories has associated transform operations that may be performed for that category;

(d) referencing the XML configuration document at the routing component to determine a category associated with the notification and performing at the routing component one or more of the associated transform operations on the notification content of the XML document;

(e) forwarding the notification from the routing component to a delivery component of the notification service for delivery to the notification sinks of the network;

(f) changing the XML configuration document at the router by adding or deleting nodes of the XML document to add or delete different categories of notifications, and editing transform operations consistent with the added or deleted categories; and

(g) repeating parts (a) through (e) for any subsequent notification corresponding to the changed categories of notifications.

48. (Previously Presented) In a network environment comprised of one or more computer or devices such as mobile devices that serve as notification sources, meaning that such computer or devices serve as sources where notifications are generated in response to an event, such notifications being generated in a network format comprised of an XML document included within an HTTP post request or included with a SOAP message that is included within an HTTP post request, and wherein the network is also comprised of one or more computers or devices that serve as notification sinks, meaning that such computer or devices serve as destinations on

the network where the generated notifications are to be sent, a computer program product for implementing a method for delivering such notifications from a notification service that scales the notifications to the number and variety of notification sources and notification sinks at the time such notifications are generated and delivered, the method comprising:

(a) receiving, at a listening component of the delivery service, a notification generated by a notification source in a network format comprised of an XML document included within an HTTP post request, notification content of the notification being structured within the XML document that identifies data including a category of notification and transform operations associated with the category that may be performed on notifications of the particular category;

(b) translating the notification into an internal processing format

(c) forwarding the translated notification to a routing component of the notification service where categorizations of notifications that may be received are stored in an XML configuration document, wherein each of the categories has associated transform operations that may be performed for that category;

(d) referencing the XML configuration document at the routing component to determine a category associated with the notification and performing at the routing component one or more of the associated transform operations on the notification content of the XML document;

(e) forwarding the notification from the routing component to a delivery component of the notification service for delivery to the notification sinks of the network;

(f) changing the XML configuration document at the router by adding or deleting nodes of the XML document to add or delete different categories of notifications, and editing transform operations consistent with the added or deleted categories; and

(g) repeating parts (a) through (e) for any subsequent notification corresponding to the changed categories of notifications.

49. (Previously Presented) The method of claim 47, further comprising a step for scaling the notification service in order to take into account the changes in the number of notification sources or notification sinks on the network, the scaling being performed by:

providing the listener, routing, and delivery components of the notification service with a plurality of identical modules for performing the functions of the listener, routing, and delivery components;

providing each of the listener, routing, and delivery components with a load balancing function that distributes a received notification to one of the modules of that component; and

changing the number of modules at one or more of the listener, routing, and delivery components in order to take into account changes in the number of notification sources or notification sinks on the network.

50. (Previously Presented) The computer program product of claim 48, wherein the listener component of the notification service receives the notification from a wireless device.

51. (Currently Amended) The computer program product of claim 50, further comprising:  
an act of delivering the notification to a mobile service provider.

52. (Previously Presented) The computer program product of claim 48, wherein the listener component of the notification service receives the notification from a mobile service provider.

53. (Currently Amended) The computer program product for implementing the method of claim 52, further comprising:  
an act of delivering the notification to a wireless device.

54. (Previously Presented) The computer program product of claim 48, wherein the act of referencing the configuration XML document at the routing component to determine a category associated with the notification comprises:  
determining that the notification is an instant message.

55. (Previously Presented) The computer program product of claim 48, wherein the act of referencing the configuration XML document at the routing component to determine a category associated with the notification comprises:

an act of failing to detect any category associated with the notification; and

an act of determining that the notification is of a default category based on the failure to detect any category associated with the notification.

56. (Previously Presented) The computer program product of claim 48, wherein the act of referencing the configuration XML document at the routing component to determine a category associated with the notification comprises:

determining that the notification is a buddy list-related notification.

57. (Previously Presented) The computer program product of claim 48, wherein the act of referencing the configuration XML document at the routing component to determine a category associated with the notification comprises:

determining that the notification is a news-related notification.

58. (Previously Presented) The computer program product of claim 48, wherein the act of referencing the configuration XML document at the routing component to determine a category associated with the notification comprises:

determining that the notification is a mobile-originated notification.

59. (Previously Presented) The computer program product of claim 48, wherein the act of performing one or more transform operations on the notification content based on the category associated with the notification comprises:  
determining whether to check that the notification should be muted.

60. (Previously Presented) The computer program product of claim 48, wherein the act of performing one or more transform operations on the notification content based on the category associated with the notification comprises:  
accessing a user profile associated with a sender or receiver of the notification.

61. (Previously Presented) The computer program product of claim 48, wherein the act of performing one or more transform operations on the notification content based on the category associated with the notification comprises:  
authenticating the notification by verifying whether a user account is disabled or authorized.

62. (Previously Presented) The computer program product of claim 48, wherein the act of performing one or more transform operations on the notification content based on the category associated with the notification comprises:  
inserting an advertisement into the notification.

63. (Previously Presented) The computer program product of claim 48, wherein the act of performing one or more transform operations on the notification content based on the category associated with the notification comprises:  
formatting the notification for the notification sink.

64. (Previously Presented) The computer program product of claim 48, wherein the act of performing one or more transform operations on the notification content based on the category associated with the notification comprises:  
determining whether a user has exceeded a message limit.

65. (Previously Presented) The computer program product of claim 48, wherein the act of performing one or more transform operations on the notification content based on the category associated with the notification comprises:  
determining the transform operations to perform based on the category.

66. (Previously Presented) The computer program product of claim 65, further comprising an act of determining the order of operations to perform based on the category.

67. (Previously Presented) The computer program product of claim 48, further comprising a step for scaling the notification service in order to take into account the

Art Unit: 2142

changes in the number of notification sources or notification sinks on the network, the scaling being performed by:

- providing the listener, routing, and delivery components of the notification service with a plurality of identical modules for performing the functions of the listener, routing, and delivery components;

- providing each of the listener, routing, and delivery components with a load balancing function that distributes a received notification to one of the modules of that component; and

- changing the number of modules at one or more of the listener, routing, and delivery components in order to take into account changes in the number of notification sources or notification sinks on the network.



5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Meucci at (571) 272-3892. The examiner can normally be reached on Monday-Friday from 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell, can be reached at (571) 272-3868. The fax phone number for this Group is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Beatriz Prieto*  
BEATRIZ PRIETO  
PRIMARY EXAMINER  
1/13/06